DOI: 10.24191/ijsms.v8i1.21896

The Effect of Green Transformational Leadership on Service Employees in Indonesia

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Received: 20 January 2023
Accepted: 10 March 2023
Published: 31 March 2023

ABSTRACT

The purpose of this study was to analyse the effect of green transformational leadership on green creativity, green intrinsic motivation, and green extrinsic motivation on green creativity in service companies in Indonesia. This research method uses validity test analysis tools and reliability tests with the SmartPLS Version 3.0 program. Based on the Variance Based Structural Equation Modelling (SEM) approach. This research was conducted at a state-owned enterprise service company in Jogjakarta Province - Indonesia. Respondents in this study amounted to 119 people, with a saturated sample method, and the sampling technique used double sampling. The results show that green transformational leadership has no effect on green creativity, green transformational leadership increases and is significant on green intrinsic motivation, green intrinsic motivation influences green creativity, green intrinsic motivation partially mediates transformational leadership on green creativity, and green extrinsic motivation moderates the effect of motivation green intrinsic to green creativity.

Keywords: *Green Creativity; Green Extrinsic Motivation; Green Intrinsic Motivation; Green Transformational Leadership*

INTRODUCTION

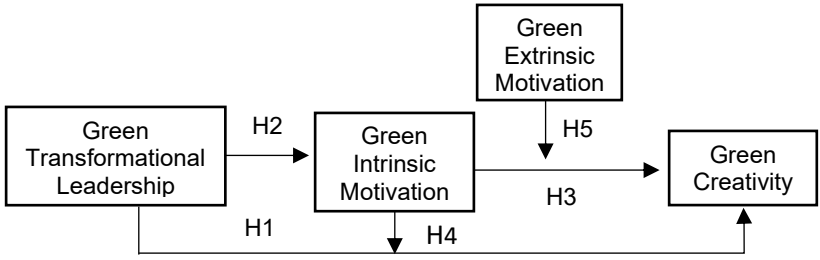
Recently, green management and organizational philosophy have gained popularity both among industry and scholars to reduce the impact of industrial waste and the harm caused by conventional organizations and products. Stakeholders and scholars have pressed organizations to develop policies to achieve social, economic and environmental outcomes. Several studies show that green information technology and computer practices can help reduce carbon waste, waste activity, and energy consumption in organizations (Bai et al., 2017). This will improve the company's performance image and market share (Chen & Chang, 2013; Packalén, 2010; Yong et al., 2019). Thus, in academia and industry, the research focus is shifting from general considerations of green business to functional areas of greening, such as green innovation and its technologies (Zailani et al., 2015), green finance (Przychodzen et al., 2018), green resource management (Yong et al., 2019) and green creativity (Awan et al., 2019).

As green creativity assessments are put on the agenda, companies can gain green awards, which become a competitive advantage over other companies in an increasingly innovative environment (Chen, 2008). Green creativity refers to developing original and green ideas about valuable eco-friendly products, practices or services (Chen & Chang, 2013; Eide et al., 2020; Song & Yu, 2018), and it depends on different organizations and individuals, including leadership (Chen & Chang, 2013). The issue of green creativity in Indonesia involves local wisdom in collaboration with organizations and leadership, these green ideas will create valuable environmentally friendly services, products and practices.

Mittal and Dhar (2016) argue that green transformational leadership promotes employees' green creative behaviour, which can help reduce paper and water use and increase recycling for environmental sustainability purposes. All of these are functions of green leadership (Jia et al., 2018; Singh et al., 2020; Tuan, 2019). Although green transformational leadership is an important component of the organization, individual antecedents such as green intrinsic and extrinsic motivation become very important.

Green intrinsic motivation is the motivation involved in green behaviour that arises from within the individual naturally. Loving the environment and green production encourages employees to create products and services that save and preserve the environment from damage caused by their actions, policies or organization. Green extrinsic motivation refers to taking pro-environmental actions to reduce waste, increase efficiency, and preserve the environment because these behaviours can lead to several different outcomes, such as rewards, approval from others, or avoiding punishment (Deci & Ryan, 2015; Hughes et al., 2018a). To facilitate understanding, more details are in Figure 1.

Figure 1
Research model



LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

The Effect of Green Transformational Leadership on Green Creativity

According to Chen and Chang (2013), Green transformational leadership enables subordinates to think creatively, examine problems from different angles, and seek new solutions to environmental problems. As a result, employees are looking for new and fresh approaches to their green tasks and ecological problems, so green transformational leadership will likely increase employee green creativity (Mittal & Dhar, 2016). This is corroborated by the study of Chen and Chang (2013), which states that green transformational leadership will promote green creativity and green product development performance. From the discussion above, the hypothesis is formulated as follows:

H1: Green transformational leadership has a positive effect on employee green creativity.

The Effect of Green Transformational Leadership on Green Intrinsic Motivation

Green transformational leadership, through vision, charisma, and inspirational motivation, gives meaning to environmental tasks because getting encouragement and recognition by leaders increases their interest in and desire to focus on their green tasks (Chen & Chang, 2013), and through intellectual stimulation, leaders increase the curiosity level of subordinates to explore various dimensions of environmental issues, with more passion (Mittal & Dhar, 2016). Thus, this leadership factor increases employees' love and interest in environmental projects and issues. Therefore, the hypothesis is:

H2: Green transformational leadership increases employees' green intrinsic motivation.

The Effect of Green Intrinsic Motivation on Green Creativity

Based on the perspective of motivation and creativity theory, according to Deci (2017), Employees who lack enthusiasm, passion, and interest in doing green creative tasks may produce a different result. Green intrinsic motivation can operate only when employees are interested in environmental issues. Some employees may have a higher love and passion for the green environment, and they may enjoy doing green tasks and projects more. For example, some people like to do green work, maintain green plants, and create a green natural environment (Ulrich & Simons, 1991). Based on this discussion, the hypothesis is as follows:

H3: Green intrinsic motivation has a positive effect on green creativity.

The Influence of Green Intrinsic Motivation Mediators on Green Transformational Leadership on Green Creativity

According to Amabile and Pillemer (2012), using a component creativity theory framework, leadership has a responsibility to produce green motivation that promotes green creative thinking in an organization.

For example, a study conducted in the information industry in China revealed that leadership affects the intrinsic motivation of employees, which in turn has a positive effect on creativity (Zhang & Bartol, 2010). Another study found that intrinsic motivation greatly mediates between transformational leadership and employee creativity (Shin & Zhou, 2003). Based on this, the hypothesis is formulated as follows:

H4: Green intrinsic motivation mediates the relationship between green transformational leadership and green creativity.

Moderator Effect of Green Extrinsic Motivation on Green Intrinsic Motivation on Green Creativity

Deci and Ryan (2015) define green extrinsic motivation as "green and pro-environmental behaviour driven by external rewards such as fame, praise, money, and value." Individuals who have higher green intrinsic motivation tend to show pro-environmental behaviour, and they may feel proud, happy, and enjoy doing environmental tasks. However, extrinsic rewards for pro-environmental activities can reduce employees' green intrinsic motivation. For example, the componential creativity theory by Amabile (2012) states that many external factors, such as tangible rewards, deadlines, punishments, or negative feedback, decrease motivation to be creative. A recent review study also revealed that extrinsic motivation tends to reduce self-determination and motivation for creative behaviour due to excessive controlling factors (Hughes et al., 2018). Therefore, the fifth hypothesis is:

H5: Green extrinsic motivation moderates the effect of green intrinsic motivation on employees' green creativity.

METHODOLOGY

The approach used in this study is the multivariate analysis approach. The research model adopted from research by Li et al. (2020) for the variable Green Creativity, Mittal and Dhar (2016) for the variable Green Transformational Leadership, and the variable Green Intrinsic Motivation and Green Extrinsic Motivation adopted by Liu and Liu (2022). These

variables were measured by 23 indicators, measured with a Likert scale of 1 - 5.

The sampling method in this study was purposive sampling, and the Sample was saturated with Google form so that the number of respondents used in this study was the entire population, namely 119 employees (who have subordinates, a minimum position of supervisor) of state-owned service companies in the province of Jogjakarta - Indonesia. The sampling technique used in this study was double sampling which was done to eliminate bias in the research results because some respondents did not complete the questionnaire correctly, so re-sampling had to be done.

The outer model was carried out by testing the quality of raw data instruments using reliability tests using the Cronbah's Alfa method and Composite Reliability > 0.7 (Werts et al., 1974), while validity testing using convergent validity and discriminant validity, where convergent validity with external loading factor > 0.70 (Chin, 1998), and Discriminant Validity with Average Variable extract (AVE) > 0.50 (Hair et al., 2014). Inner model by looking at goodness-of-fit (Bentler & Bonett, 1987). f-square test > 0.35 (Sarstedt et al., 2017). o, produce the output of this study using descriptive statistical analysis and Structural Equation Modelling (SEM) analysis (Hamid & Anwar, 2019) with the SmartPLS workspace version 3 software tool.

RESULTS

In this study, the number of samples was 119 respondents, dominated by 67.22% who were men, aged 31-35 years by 31.09%, with Undergraduate / Bachelor education 67.23. Details are in Table 1.

Instrument Test

Subsequent data-dropping tests were carried out, and the results of the validity test resume in full in Table 2.

Table 1
Demographic information of the Sample

Variables	Number (N)	Percent (%)
Gender		
Male	80	67.22
Female	39	32.78
Age		
26 – 30	28	23.53
31 – 35	37	31.09
36 – 40	17	14.28
41 – 45	15	12.60
46 – 50	16	13.44
> 50	6	5.04
Education		
Senior High School	11	9.24
Undergraduate/ Bachelor	80	67.23
Graduate	28	23.53
Total Respondent	119	100.00

Source: processed primary data, 2022

Table 2
Summary of Mean and Loadings

Variable	Question Items	Mean	Loading
Green creativity (Y)	Y.1. leaders suggest new ways to achieve environmental goals	4.101***	0.733
	Y.2. leaders propose new ideas to improve environmental performance	3.782	0.743
	Y.3. leaders promote and champion new green ideas to others	3.681	0.758
	Y.4. leaders develop an adequate plan for the implementation of new green ideas	3.924	0.871
	Y.5. leaders will rethink new green ideas	3.866	0.860
	Y.6. leaders will find creative solutions to environmental problems	3.630**	0.887
Green Transformational Leadership (X1)	X1.1. Leaders provide a clear environmental vision for employees to follow	4.269***	0.871
	X1.2. Leaders inspire employees with environmental plans	4.084*	0.669*
	X1.3. Leaders make employees work together for the same environmental goals	4.109	0.782
	X1.4. Leaders encourage employees to achieve environmental goals	4.076	0.763

	X1.5. Leaders act in light of employees' environmental beliefs	3.950**	0.712
	X1.6. Leaders stimulate employees to think of green ideas	4.185	0.743
Green Intrinsic Motivation (X2)	X2.1. leaders like to come up with new green ideas	3.933	0.837
	X2.2. leaders like to try to complete environmental tasks at work	3.966*	0.634*
	X2.3. leaders enjoyed tackling entirely new environmental assignments	3.748**	0.840
	X2.4. leaders love to promote green ideas in their work	4.000	0.773
	X2.5. the leader feels excited when he has new green ideas	4.118***	0.789
	X2.6. leaders feel like they want to be more involved in the development of green ideas	3.983	0.793
Green Extrinsic Motivation (Z)	Z.1. I am highly motivated by the recognition I can get from my organization for environmental work	3.588***	0.918
	Z.2. I often think about awards, salaries, or promotions for my ward assignments	3.521	0.905
	Z.3. I want others to know how well I can actually do at my ward tasks	3.345	0.922
	Z.4. I have to feel that I am getting something for my ward tasks	3.336**	0.935
	Z.5. I worry about how other people will react to the ideas of my environment	3.437	0.883

Source: primary data processed by PLS 3.0, 2022; *not used, low loading factor; **lowest mean; ***highest mean

Convergent Validity testing on all construct indicators shows that the indicator has met convergent validity because it has a loading factor value above 0.50. The Average Variance Extracted (AVE) value for all variables is above 0.50. The variables in this study are valid. Details are in Table 3.

Table 3
Average Variance Extract Test Results

Variable	*Average Variance Extract (AVE)*
Green Creativity (Y)	0.659
Green Transformational Leadership (X1)	0.617
Green Intrinsic Motivation (X2)	0.664
Green Extrinsic Motivation (Z)	0.833

Source: primary data processed by PLS 3.0, 2022

Furthermore, Cronbach's alpha testing and composite reliability are seen in Table 4.

Table 4
Cronbach's Alpha and Composite Reliability

Variable	*Cronbach's Alpha*	*Composite Reliability*	Decision
Green Creativity (Y)	0.895	0.920	Reliable
Green Transformational Leadership (X1)	0.843	0.889	Reliable
Green Intrinsic Motivation (X2)	0.873	0.908	Reliable
Green Extrinsic Motivation (Z)	0.950	0.961	Reliable

Source: primary data processed by PLS 3.0, 2022

The value of the latent Variable has a Composite Reliability and Cronbach's Alpha value of more than 0.70 (≥ 0.70), which means that the construct has good reliability. Sarwono (2010) states that the variant of the extract (advanced reliability test) is a minimum value of 0.5; the closer to 1, the more reliable. From the results of the distribution of respondents' answers above to all variables with four variables and 23 indicators, all have good reliability. Furthermore, testing the discriminant validity (Fornell lesser criterion) is seen in Table 5.

Table 5
Discriminant Validity (Fornell Larcker Criterion)

Variable	Green Creativity (Y)	Green Trans. Leadership (X1)	Green Extrinsic Motivation (X2)	Green Intrinsic Motivation (Z)
Green Creativity (Y)	0.812			
Green Transformational Leadership (X1)	0.817	0.785		
Green Intrinsic Motivation (X2)	0.851	0.792	0.815	
Green Extrinsic Motivation (Z)	0.845	0.773	0.732	0.913

Source: primary data processed by PLS 3.0, 2022

The square root of the Average Variance Extracted (AVE) for each construct is greater than the correlation between one construct and the other constructs in the model so that the constructs in the estimated model meet

the criteria of discriminant validity. Furthermore, testing the goodness-of-fit measures for SEM is seen in Table 6.

Table 6
Goodness-of-Fit Measures

Indicator	Result	Criteria
SUMMER	0.082	*acceptable if <= 0.08*
d_ULS	1.549	*acceptable if >= 0.95*
d_G	0.643	*acceptable if P >= 0.05*
Chi-Square	403.504	*close to zero*
NFI	0.822	*acceptable if >= 0.90*
rms-Theta	0.154	*close to zero*

Source: primary data processed by PLS 3.0, 2022

Table 6 shows that the Goodness-of-fit measurement has shown a good model, except for the NFI, which is below the criteria, which is equal to 0.822. Furthermore, hypothesis testing is seen in Table 7.

Table 7
Hypothesis Testing

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Moderation Effect -> Green Creativity (Y)	0.102	0.100	0.050	2.027	0.043
Green Transformational Leadership (X1) -> Green Creativity (Y)	0.169	0.173	0.089	1.893	0.059
Green Transformational Leadership (X1) -> Green Intrinsic Motivation (X2)	0.792	0.793	0.039	20.211	0.000
Green Extrinsic Motivation (Z) -> Green Creativity (Y)	0.451	0.459	0.078	5.760	0.000
Green Intrinsic Motivation (X2) -> Green Creativity (Y)	0.442	0.433	0.088	5.007	0.000

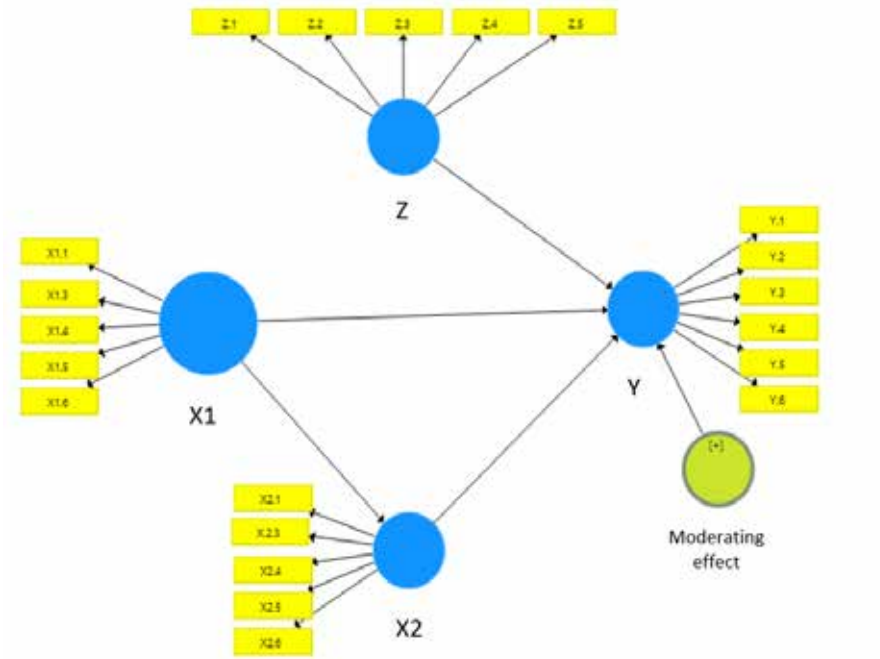
Source: primary data processed by PLS 3.0, 2022

The results of the hypothesis test concluded that the influence of the moderating effect on green creativity was positive, as evidenced by the original sample value of 0.102 and the t-statistic value of 2.027, where the

t-statistic value was above the one-tail t-table, namely 1.96 and a p-value smaller than 0.05. Green transformational leadership on green creativity has a negative value, as indicated by the original sample value of 0.169. The t-statistic value is 1,893.

Green transformational leadership on green intrinsic motivation has a positive and significant value, as indicated by the original sample value of 0.792 and the t-statistic value of 20.211. Green extrinsic motivation toward green creativity has a positive value, as indicated by the original sample value of 0.451 and the t-statistic value of 5.760. Green intrinsic motivation for green creativity has a positive value, as indicated by the original sample value of 0.442 and the t-statistic value of 5.007.

Figure 2
Path Diagram



Source: primary data processed by PLS 3.0, 2022

DISCUSSION

Green Transformational Leadership Has No Effect on Employee Green Creativity

The results of the analysis show that the green transformational leadership variable has no effect and is not significant on the employee's green creativity, which is indicated by a significant value at a statistical value of 1,893, which is smaller than the required average of 1.96. This condition indicates that the worse the green transformational leadership, the lower the employee's green creativity level.

Field findings show the results of descriptive analysis on the distribution of questionnaires on the question items, X1.2. Leaders inspire employees with environmental plans (lowest mean). This illustrates that green transformational leadership has not inspired employees with environmental plans, besides that green transformational leadership with a high environmental perspective is needed, which can provide inspiration, vision, and motivation for employees to bring out green creativity, as reported in several recent studies in Taiwan and India (Chen & Chang, 2013; Mittal & Dhar, 2016). In addition, it must be led by leaders who are supported by employees because they are able to provide attention and suggestions for green creativity for employees (Qu et al., 2015). So, this leadership not only exercises authority but also understands the needs of employees, such as green training to train employees to produce a green performance as well (Jia et al., 2018).

Green Transformational Leadership Increases and Significance to Green Intrinsic Motivation

The analysis results show that the green transformational leadership variable has a positive or increasing and significant effect on green intrinsic motivation. This condition indicates that the better the green transformational leadership, the higher the level of green intrinsic motivation.

The results of the descriptive analysis of this study can be seen in the distribution of the questionnaires on question item: X1.1. Leaders provide a clear environmental vision for employees to follow (highest

mean). This illustrates that employees perceive that green transformational leadership is able to increase the green intrinsic motivation of their employees. This research is in line with previous research conducted by Mittal and Dhar (2016), which stated that leaders increase the level of curiosity of subordinates to explore various dimensions of environmental problems with more enthusiasm. And with encouragement and recognition by leaders, increased interest and desire to focus on their green tasks (Chen & Chang, 2013).

Green Intrinsic Motivation Has a Positive Effect on Green Creativity

The results of the analysis show that the green intrinsic motivation variable has a positive effect on green creativity. This condition indicates that the better the green intrinsic motivation, the higher the green creativity level of employees. The results of the descriptive analysis of this study can be seen in the distribution of the questionnaires on the question items with the highest mean, namely X2.5. He feels energized when he has new green ideas. This illustrates that employees consider that employees' green intrinsic motivation has a positive relationship with employees' green creativity with existing green ideas. Research is in line with and strengthened by research conducted by Deci and Ryan (2015), which states that employees must be motivated to use skills, knowledge, and intellectual abilities to appear creative. Intrinsic motivation reflects the values that underlie the enthusiasm and interest of employees, which can cause employees to experience green creativity to preserve the environment from resource depletion, equipment contamination, and waste (Fahmi & Saputra, 2015). This also causes some people to like to do green work to maintain and create a green environment (Ulrich & Simons, 1991).

Green Intrinsic Motivation Mediates the Relationship Between Green Transformational Leadership and Green Creativity.

The analysis results show that green intrinsic motivation mediates the relationship between green transformational leadership and green creativity with a status partial mediating effect. This condition indicates that when a company adopts green transformational leadership, green employee intrinsic motivation increases which consequently increases employee green creativity.

The results of the descriptive analysis of this study can be seen in the distribution of the questionnaires on question items Y.1. leaders suggest new ways to achieve environmental goals. This illustrates that employees consider a leader who fosters employee creativity by providing suggestions or encouragement, or intrinsic motivation in the form of new ways of achieving environmental goals because leaders must have the responsibility to produce green motivation that promotes green creative thinking in an organization (Amabile & Pillemer, 2012). the positive effect of this employee's intrinsic motivation can encourage creativity (Zhang & Bartol, 2010). So, motivation is very well implemented by leaders so that employee creativity increases (Shin & Zhou, 2003).

Green Extrinsic Motivation Moderates the Effect of Green Intrinsic Motivation on Green Creativity

The analysis results show that the variable green extrinsic motivation has a positive effect on the effect of green intrinsic motivation on employee green creativity. Based on the analysis results, it can be seen in the distribution of the questionnaires on the question items, Z.1. I am highly motivated by the recognition I can get from my organization for environmental work (highest mean). This illustrates that applying recognition and performance feedback to communicate appreciation for creative work increases employee perceptions and beliefs. In other words, the creative and innovative efforts made by employees are highly valued by leaders within the company (Deci, 2017; Hughes et al., 2018a)

Avoidance of punishment threats, competition with each other, and negative feedback can reduce employees' green intrinsic motivation towards their green creative performance (Amabile, 2012), thereby reducing the impact of intrinsic motivation on employee creativity (Saputra & Ariyanto, 2019).

CONCLUSION AND RECOMMENDATION

This research concludes that Green Transformational Leadership has no effect on Employee Green Creativity. Meanwhile, Green Intrinsic Motivation has a positive effect on Green Creativity and, at the same time, mediates it. This is also reinforced by the Green Extrinsic Motivation, and

it turns out that the Moderates are positive Intrinsic Motivation on Green Creativity. These findings indicate that both intrinsic and extrinsic motivation can increase the green creativity of service employees both as mediators and moderators. Both policies can be used as the basis for regulations in the company.

Since Green Transformational Leadership does not directly affect Employee Green Creativity, apart from intrinsic and extrinsic motivation, the first recommendation of this research is that leaders need to fight for new green ideas to their employees more intensively, so that employees are more confident that their leaders are indeed fighting for and siding with environmentally friendly policies. The second recommendation, as stated in the conclusion, is that extrinsic and extrinsic motivation can be used as a basis for making policies and regulations in the company.

CONTRIBUTIONS OF AUTHORS

The authors confirm the equal contribution in each part of this work. All authors reviewed and approved the final version of this work.

FUNDING

This work received no specific grant from any funding agency.

CONFLICT OF INTERESTS

All authors declare that they have no conflicts of interest.

ACKNOWLEDGEMENT

The researcher would like to thank the management study program, the Faculty of Economics, Mercubuana University, Yogyakarta, Indonesia, which has granted permission for independent research to the researchers.

REFERENCES

Amabile, T. M. (2012). Componential theory of creativity. *Encyclopedia of Management Theory*. https://doi.org/10.4135/9781452276090.n42

Amabile, T. M., & Pillemer, J. (2012). Perspectives on the social psychology of creativity. *The Journal of Creative Behavior*, *46*(1), 3–15. https://doi.org/10.1002/jocb.001

Awan, U., Sroufe, R., & Kraslawski, A. (2019). Creativity enables sustainable development: Supplier engagement as a boundary condition for the positive effect on green innovation. *Journal of Cleaner Production*, *226*, 172–185. https://doi.org/10.1016/j.jclepro.2019.03.308

Bai, C., Kusi-Sarpong, S., & Sarkis, J. (2017). An implementation path for green information technology systems in the Ghanaian mining industry. *Journal of Cleaner Production*, *164*, 1105–1123. https://doi.org/10.1016/j.jclepro.2017.05.151

Bentler, P., & Bonett, B. (1987). Significance tests and goodness of lit in the analysis of covariance structures. *Psychological Bulletin*, *88*, 588–606.

Chen, Y.S. (2008). The driver of green innovation and green image–green core competence. *Journal of Business Ethics*, *81*(3), 531–543. https://doi.org/10.1007/s10551-007-9522-1

Chen, Y.S., & Chang, C.H. (2013). The determinants of green product development performance: Green dynamic capabilities, green transformational leadership, and green creativity. *Journal of Business Ethics*, *116*(1), 107–119. https://doi.org/10.1007/s10551012-1452-x

Chin, W. W. (1998). Commentary: Issues and Opinion on Structural Equation Modeling. *MIS Quarterly*, *22*(1), vii–xvi.

Deci, E. L. (2017). Intrinsic Motivation and Self-Determination☆. *Reference Module in Neuroscience and Biobehavioral Psychology*, 437–448. https://doi.org/10.1016/B978-0-12-809324- 5.05613-3

Deci, E. L., & Ryan, R. M. (2015). Self-Determination Theory. *International Encyclopedia of the Social & Behavioral Sciences (Second Edition)*, 486–491. https://doi.org/10.1016/B978-0-08-097086-8.26036-4

Eide, A. E., Saether, E. A., & Aspelund, A. (2020). An investigation of leaders' motivation, intellectual leadership, and sustainability strategy in relation to Norwegian manufacturers' performance. *Journal of Cleaner Production*, *254*, 120053. https://doi.org/10.1016/j.jclepro.2020.120053

Fahmi, A. L., & Saputra, A. R. P. (2015). Peran Strategi Moderasi Motivasi Dan Komunikasi Pada Kinerja Karyawan Dengan Lingkungan Kerja Sebagai Variabel Independen. *Jurnal Perilaku Dan Strategi Bisnis*, *3*(1), Article 1. https://doi.org/10.26486/jpsb.v3i1.457

Hair, J., Hult, T., Ringle, C., & Sarstedt, M. (2014). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). Thousand Oaks, CA: Sage Publications, Inc.

Hamid, R. S., & Anwar S. M. (2019). Structural Equation Modeling (SEM) Berbasis Varian: Konsep Dasar dan Aplikasi dengan Program SmartPLS 3.2.8 dalam Riset Bisnis, PT Inkubator Penulis Indonesia (Institut Penulis Indonesia), Jakarta.

Hughes, D. J., Lee, A., Tian, A. W., Newman, A., & Legood, A. (2018). Leadership, creativity, and innovation: A critical review and practical recommendations. *The Leadership Quarterly*, *29*(5), 549–569. https://doi.org/10.1016/j.leaqua.2018.03.001

Jia, J., Liu, H., Chin, T., & Hu, D. (2018). The continuous mediating effects of GHRM on employees' green passion via transformational leadership and green creativity. *Sustainability*, *10*(9), 3237. https://doi.org/10.3390/su10093237

Li, W., Bhutto, T. A., Xuhui, W., Maitlo, Q., Zafar, A. U., & Bhutto, N. A. (2020). Unlocking employees' green creativity: The effects of green transformational leadership, green intrinsic, and extrinsic motivation. *Journal of Cleaner Production*, *255*, 120229.

Liu, J., & Liu, J. (2022). The greater the incentives, the better the effect? Interactive moderating effects on the relationship between green motivation and green creativity. *International Journal of Contemporary Hospitality Management*, *ahead-of-print*.\

Mittal, S., & Dhar, R. L. (2016). Effect of green transformational leadership on green creativity: A study of tourist hotels. *Tourism Management*, *57*, 118–127. https://doi.org/10.1016/j.tourman.2016.05.007

Packalén, S. (2010). Culture and sustainability. *Corporate Social Responsibility and Environmental Management*, *17*(2), 118–121. https://doi.org/10.1002/csr.236

Przychodzen, W., Gómez-Bezares, F., & Przychodzen, J. (2018). Green information technologies practices and financial performance–the empirical evidence from German publicly traded companies. *Journal of Cleaner Production*, *201*, 570–579. https:// doi.org/10.1016/j.jclepro.2018.08.081

Qu, R., Janssen, O., & Shi, K. (2015). Transformational leadership and follower creativity: The mediating role of follower relational identification and the moderating role of leader creativity expectations. *The Leadership Quarterly*, *26*(2), 286–299. https://doi.org/10.1016/j.leaqua.2014.12.004

Saputra, A., & Ariyanto, E. (2019). The Effect of Leader Member Exchange, Job Satisfaction and Motivation on Educational Personnels' Organizational Commitment of Jakarta Mercu Buana University. *International Review of Management and Marketing*, *9*(6), 58–66. https://doi.org/10.32479/irmm.8650

Sarstedt, M., Ringle, C., & Hair, J. (2017). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research*. Springer. https://doi.org/10.1007/978-3-319-05542-8_15-1

Sarwono, J. (2010). Pengertian dasar structural equation modeling (SEM). *Jurnal Ilmiah Manajemen Bisnis*, *10*(3), 173–182.

Shin, S. J., & Zhou, J. (2003). Transformational leadership, conservation, and creativity: Evidence from Korea. *Academy of Management Journal*, *46*(6), 703–714. https://doi.org/10.5465/30040662

Singh, S. K., Del Giudice, M., Chierici, R., & Graziano, D. (2020). Green innovation and environmental performance: The role of green transformational leadership and green human resource management. *Technological Forecasting and Social Change*, *150*, 119762. https://doi.org/10.1016/j.techfore.2019.119762

Song, W., & Yu, H. (2018). Green innovation strategy and green innovation: The roles of green creativity and green organizational identity. *Corporate Social Responsibility and Environmental Management*, *25*(2), 135–150. https://doi.org/10.1002/csr.1445

Tuan, L. T. (2019). Environmentally-specific servant leadership and green creativity among tourism employees: Dual mediation paths. *Journal of Sustainable Tourism*, *28*(1), 1–24. https://doi.org/10.1080/09669582.2019.1675674

Ulrich, R., & Simons, R. F. (1991). Losito BD, Fiorito E, Miles MA, Zelson M. *Stress Recovery During Exposure To Natural and Urban Environments. J Environ Psychol*, *11*, 201–230. https://doi.org/10.4049/jimmunol.180.5.3218

Werts, C. E., Linn, R. L., & Jöreskog, K. G. (1974). Intraclass Reliability Estimates: Testing Structural Assumptions. *Educational and Psychological Measurement*, *34*(1), 25–33. https://doi.org/10.1177/001316447403400104

Yong, J. Y., Yusliza, M., Ramayah, T., & Fawehinmi, O. (2019). Nexus between green intellectual capital and green human resource management. *Journal of Cleaner Production*, *215*, 364–374. https://doi.org/10.1016/j.jclepro.2018.12.306

Zailani, S., Govindan, K., Iranmanesh, M., Shaharudin, M. R., & Chong, Y. S. (2015). Green innovation adoption in automotive supply chain: The Malaysian case. *Journal of Cleaner Production*, *108*, 1115–1122. https://doi.org/10.1016/j.jclepro.2015.06.039

Zhang, X., & Bartol, K. M. (2010). Linking empowering leadership and employee creativity: The influence of psychological empowerment, intrinsic motivation, and creative process engagement. *Academy of Management Journal*, *53*(1), 107–128. https://doi.org/10.5465/amj.2010.48037118